

ALTEC LANSING®

PROFESSIONAL

8" Ceiling Speakers

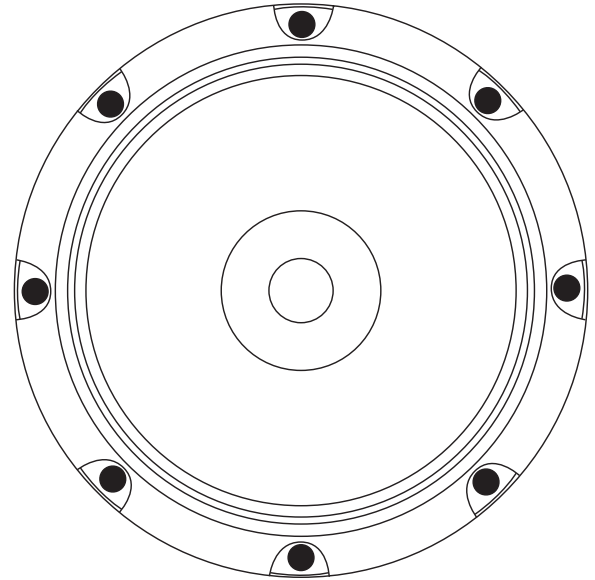
CD308-8A
CD308-4T
CD308-8T
CD308-16T

FEATURES – THE ALTEC LANSING DIFFERENCE

- Premium 8 inch / 200 mm Duplex® design
- Point-source design maximizes speech intelligibility
- 16 W EIA / 64 W peak power handling
- Available with three factory-mounted 70 V / 100 V transformers
- All transformers have a low < .6dB insertion loss
- Corrosion resistant speaker frame
- Special moisture resistant speaker cone

GENERAL PRODUCT DESCRIPTION

The Altec Lansing Professional CD308 series is a premium-grade Duplex® component designed to faithfully reproduce music program and the human voice. The CD308 family is an excellent choice for meeting spaces, under-balcony applications, A/V presentation facilities, shops & restaurants and other high quality general paging applications. The loudspeaker consists of an 8 inch / 200 mm special moisture resistant cone woofer and broad dispersion cone tweeter with heat resistant voice coils. The speaker frame has been treated for rust prevention. A 3,000 Hz first-order crossover provides smooth high frequency transitions. The double magnet design allows physical, electrical, and magnetic isolation. The optional 70 V/100 V transformers (4, 8, and 16 Watts) feature a low < 0.6 dB insertion loss.



SPECIFICATIONS

Frequency Response

78 – 20,000 Hz +/- 5 dB

Low frequency limit (-10 dB)

63 Hz

Power Handling

16 W EIA, 64 W peak

Sensitivity (SPL - 1 W 1 m)

97 dB

Maximum Output (Peak SPL)

115 dB

Magnet Weight

0.63 lb (0.29 Kg)

Impedance

Nominal - 8 Ohms

Minimal - 7.3 Ohms

Crossover

3,000 Hz

DIMENSIONS

CD308-8A

Height: 3.11 in (79.6 mm)

Diameter: 8.07 in (205 mm)

CD308-4T

Height: 3.68 in (94.1 mm)

Diameter: 8.07 in (205 mm)

CD308-8T

Height: 3.68 in (94.1 mm)

Diameter: 8.07 in (205 mm)

CD308-16T

Height: 4.11 in (104.1 mm)

Diameter: 8.07 in (205 mm)

NET WEIGHT

CD308-8A

2 lbs 7 oz (1.1 kg)

CD308-4T

3 lbs 13 oz (1.7 kg)

CD308-8T

4 lbs 1 oz (1.8 kg)

CD308-16T

4 lbs 10 oz (2.1 kg)

SHIPPING WEIGHT

CD308-8A

2 lbs 6 oz (1.4 kg)

CD308-4T

4 lbs 9 oz (2.1 kg)

CD308-8T

4 lbs 13 oz (2.2 kg)

CD308-16T

5 lbs 7 oz (2.5 kg)

TRANSFORMER

CD308-4T

4 W 70 V/100 V transformer

with 70 V taps @ 4 W, 2 W, 1 W and 0.5 W

CD308-8T

8 W 70 V/100 V transformer

with 70 V taps @ 8W, 4W, 2W and 1.0W

CD308-16T

16 W 70 V/100 V transformer

with 70 V taps @ 16W, 8W, 4W and 2.0W

ARCHITECTS & ENGINEERS SPECIFICATION

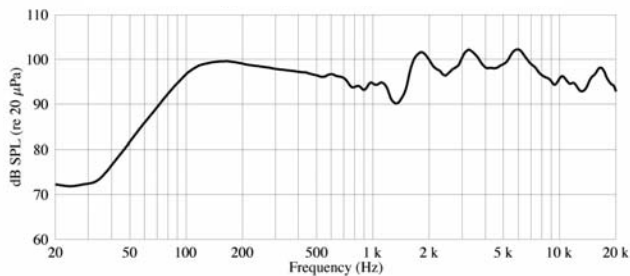
The loudspeaker shall be an Altec Lansing Professional CD308 series Duplex[®] with an 8 inch (200 mm) diameter moisture-resistant woofer and broad dispersion tweeter with heat resistant voice-coils. The speaker shall have a power rating of 16 W EIA / 64 W peak, a double magnet assembly and corrosion-resistant frame. The frequency response shall be 78 to 20,000 Hz +/- 5 dB with a sensitivity of 97 dB @ 1 W 1 m. All transformers shall have a low < 0.6 dB insertion loss. The model numbers shall be Altec Lansing Professional CD308-8A for 8 Ohms impedance, CD308-4T with a 4 Watt 70 V/100 V transformer, CD308-8T with an 8 Watt 70 V/100 V transformer, and a CD308-16T with a 16 Watt 70 V/100 V transformer.

ENCLOSURES AND BAFFLES

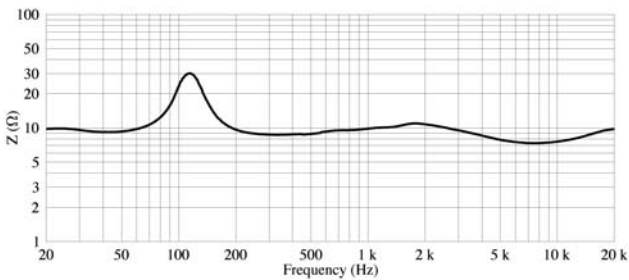
The CD308-series ceiling speakers will fit on standard 8 inch (200 mm) baffles, enclosures and back boxes.

All measurements were made in a standard AES baffle for a 12 inch driver. The driver was housed in a 1.0 ft³ (0.028 m³) enclosure.

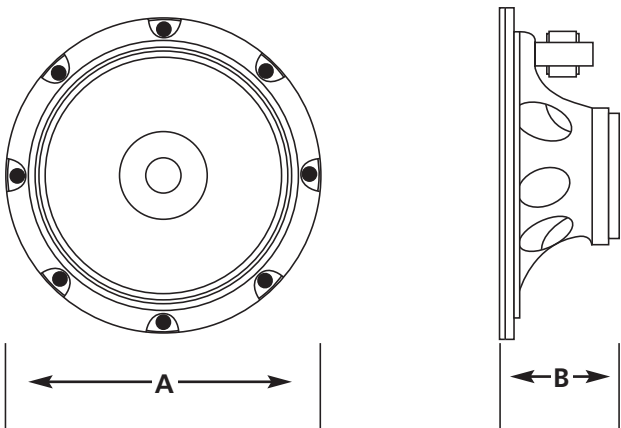
Frequency Response (1 W 1 m on-axis)



Impedance



MOUNTING DIMENSIONS



	A	B
CD308-8A	8.07 in (205 mm)	3.11 in (79 mm)
CD308-4T	8.07 in (205 mm)	3.68 in (94 mm)
CD308-8T	8.07 in (205 mm)	3.68 in (94 mm)
CD308-16T	8.07 in (205 mm)	4.11 in (105 mm)

Please note that larger volume enclosures will result in altered low frequency performance.

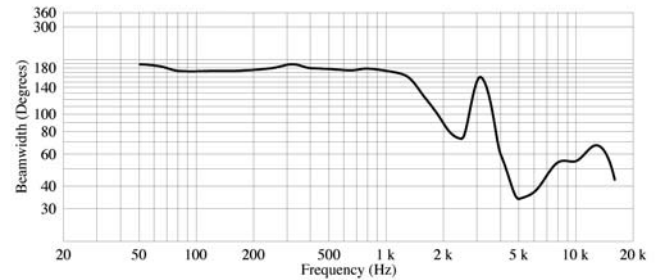
SAFETY CONSIDERATION

1. Appropriate connectors with suitable ratings must be used to make all installation connections.
2. All unused taps must be insulated with suitable insulation.
3. Transformers and speaker combinations must be supplied by a suitable amplifier incorporating ungrounded outputs only and reinforced insulation (as per IEC60065) from output to mains.

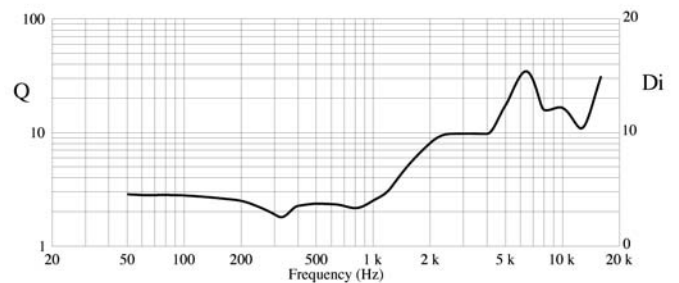
ACCESSORIES

Altec Lansing recommends use of our 8 inch (200 mm) round and square metal enclosures, grilles and tile bridge. The CD308 Series will also fit on standard industry ceiling speaker hardware.

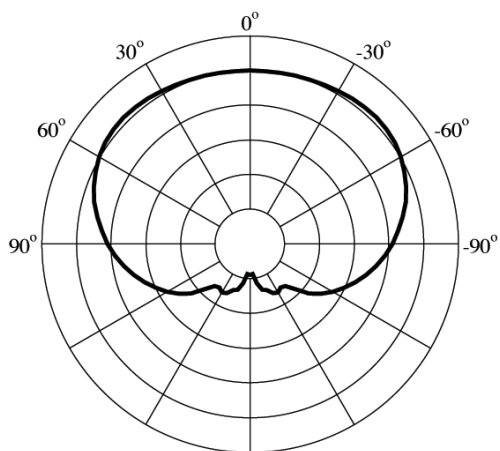
Beamwidth



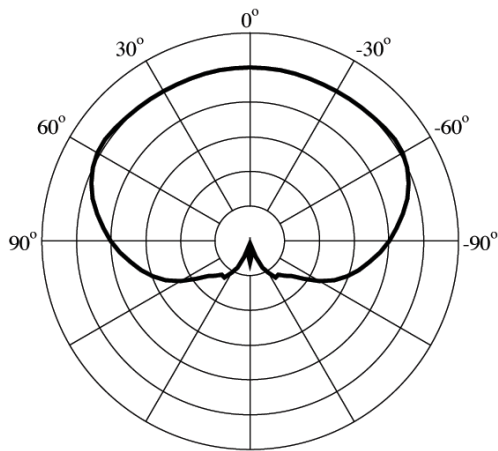
Q & Directivity Index



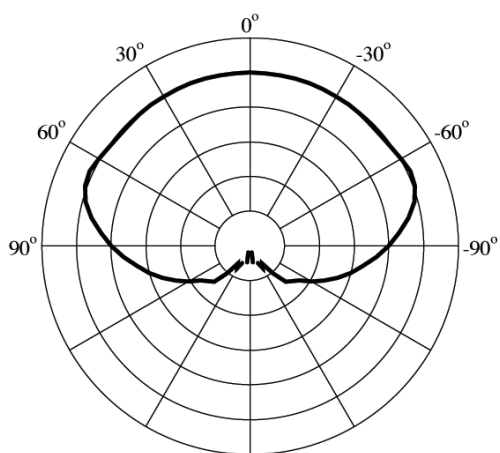
**One Octave Polar Response Charts
6 dB/Division**



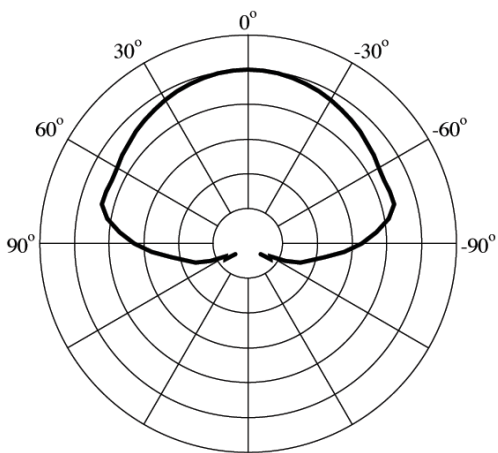
250 Hz



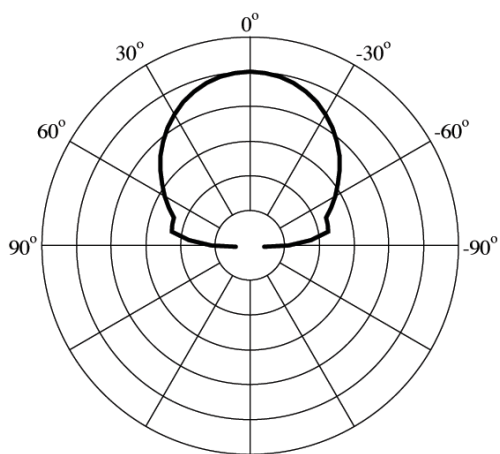
500 Hz



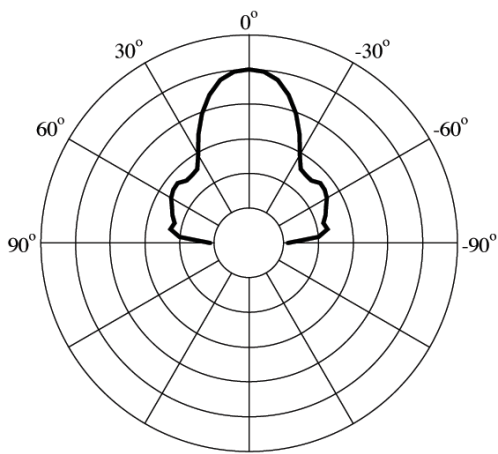
1 kHz



2 kHz



4 kHz



8 kHz

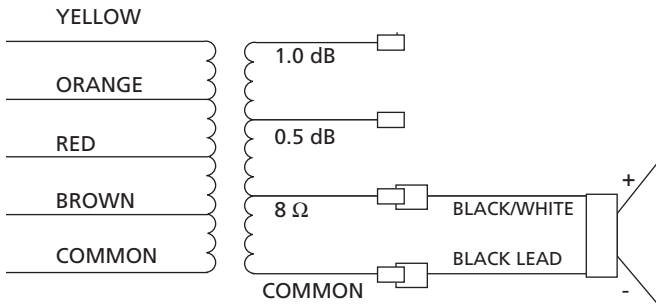
As we are continually striving to improve Altec Lansing products, specifications are subject to change without notice.

TRANSFORMER CHART

CD308

Premium 4 W Transformer (T504-71) Primary	Premium 8 W Transformer (T508-71) Primary	Premium 16 W Transformer (T516-71) Primary	70.7 V Primary Tap Color Code	100 V Primary Tap Color Code
4.0 W	8.0 W	16.0 W	Brown	Red
2.0 W	4.0 W	8.0 W	Red	Orange
1.0 W	2.0 W	4.0 W	Orange	Yellow
0.5 W	1.0 W	2.0 W	Yellow	N/A
Primary Common			Black	

WIRING DIAGRAM



**ALTEC
LANSING**

PROFESSIONAL

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